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COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Southwest Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Buchanan Preparation Plant - Consolidation Coal Company
State Route 632, Garden Creek, Buchanan County, Virginia
Permit No. SWRO10945

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Consolidation Coal Company has applied for renewal of the Title V Operating Permit for its Buchanan Preparation Plant facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Permit Contact: _____ Date: _____
Bruce Mullins
(276) 676-4825

Air Permit Manager: _____ Date: _____
Rob Feagins

Regional Director: _____ Date: _____
Allen J. Newman, P.E.

FACILITY INFORMATION

Permittee
Consolidation Coal Company
P.O. Drawer L
Oakwood, VA 24631

Facility
Buchanan Preparation Plant
Route 632
Garden Creek, Virginia

County-Plant Identification Number: 51-027-00081

SOURCE DESCRIPTION

NAICS Code: 212112 – Bituminous Coal Underground Mining – Coal Preparation, and 213113 – Coal Support Services

Raw coal is conveyed from the underground mining operation to the processing and preparation plant where it is screened and crushed to separate coal from refuse prior to entering the wet preparation plant, which includes density separation and froth flotation to further separate coal from refuse. Cleaned coal may be dried using a thermal dryer fired by either coal bed methane or coal, or sent directly to storage or load-out for shipment by railcar or truck.

Coal support services include a mine water desalination plant which produces road salt and water that may be discharged or reused in the preparation plant and mine.

Air emissions from the facility include particulate matter (PM), particulate matter with a mean diameter of less than or equal to 10 microns (PM-10), volatile organic compounds (VOC), oxides of nitrogen (NO_X), sulfur dioxide (SO_2), carbon monoxide (CO), hazardous air pollutants (HAP) and greenhouse gases (GHG).

The facility is a Title V major source of PM-10, VOC, CO, SO_2, NO_x and GHG. This source is located in an attainment area for all pollutants. The coal processing and preparation facility is currently permitted under a Title V operating permit with an expiration date of January 10, 2013, and a Prevention of Significant Deterioration (PSD) permit issued in accordance with 9 VAC 5 Chapter 80 Article 8 of Virginia air quality regulations on July 30, 2004 (as amended August 24, 2005). The mine water desalination facility is currently permitted under a minor new source review (NSR) permit issued in accordance with 9 VAC 5 Chapter 80 Article 6 of Virginia air quality regulations on January 23, 2009 (as amended October 28, 2009 and August 26, 2011). There are no permit conditions applicable to the underground mining operation.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was completed on August 9, 2011. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
Underground Coal Mine							
BM1	Various vent shafts	Underground coal mine	1250 TPH	Not Applicable (N/A)	N/A	N/A	N/A
Coal Processing and Preparation Equipment							
S001A	Z01	Hoist #1 dump to 100-ton surge bin BIN1	1200 TPH	Partial enclosure	D001	PM/PM-10	7/30/04 (as amended 8/24/05)
S001B	Z01	Skip to ground	300 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S001C	Z01	BIN1 feeder to rotary breaker RB1 pre-screens SC1	1200 TPH	Full enclosure	D002	PM/PM-10	7/30/04 (as amended 8/24/05)
S001E	Z01	SC1 underflow to raw coal silo RCS1 feed conveyor C1	1200 TPH	Full enclosure	D004	PM/PM-10	7/30/04 (as amended 8/24/05)
S001F	Z01	SC1 overflow to rotary breaker RB1	1200 TPH	Full enclosure	D005	PM/PM-10	7/30/04 (as amended 8/24/05)
S001H	Z01	RB1 breaker reject to breaker reject conveyor C15	1200 TPH	Full enclosure	D007	PM/PM-10	7/30/04 (as amended 8/24/05)
S001I	Z01	RB1 breaker reject conveyor C15 to reject crusher CR1	1200 TPH	Full enclosure	D008	PM/PM-10	7/30/04 (as amended 8/24/05)
S002	Z01	RB1 product to raw coal silo RCS1 feed conveyor C1	1200 TPH	Full enclosure	D010	PM/PM-10	7/30/04 (as amended 8/24/05)
S003	Z01	Feeder to reclaim hopper	300 TPH	Partial enclosure	D011	PM/PM-10	7/30/04 (as amended 8/24/05)
S004	Z01	Reclaim hopper to conveyor No. 2	300 TPH	Partial enclosure	D012	PM/PM-10	7/30/04 (as amended 8/24/05)
S005	Z01	Conveyor No. 2 to reclaim crusher	300 TPH	Partial enclosure	D013	PM/PM-10	7/30/04 (as amended 8/24/05)
S006	Z01	Reclaim crusher	300 TPH	Full enclosure	D014	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S007	Z01	Reclaim crusher to conveyor No. 3	300 TPH	Partial enclosure	D015	PM/PM-10	7/30/04 (as amended 8/24/05)
S008	Z01	Conveyor No. 3 to conveyor No. 1	300 TPH	Partial enclosure	D016	PM/PM-10	7/30/04 (as amended 8/24/05)
S009	Z01	Conveyor No. 1 to raw coal silo RCS1	1200 TPH	Full enclosure	D017	PM/PM-10	7/30/04 (as amended 8/24/05)
S011	Z01	Raw coal silo to conveyor No. 4	1100 TPH	Full enclosure	D018	PM/PM-10	7/30/04 (as amended 8/24/05)
S012	Z01	Rail car load-out chute No. 1	100 TPH	Stationary chute No. 1	D019	PM/PM-10	7/30/04 (as amended 8/24/05)
S013	Z01	Rail car load-out chute No. 2	100 TPH	Stationary chute No. 2	D020	PM/PM-10	7/30/04 (as amended 8/24/05)
S014	Z01	Conveyor No. 4 to preparation plant	1100 TPH	Full enclosure	D021	PM/PM-10	7/30/04 (as amended 8/24/05)
S015	Z01	Preparation plant (froth flotation)	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S015A	P001	Vacuum filtration	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S015B	Z01	Thickener	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S016	Z01	TD1 feed conveyor C6 to thermal dryer TD1	560 TPH	Full enclosure	D046	PM/PM-10	7/30/04 (as amended 8/24/05)
S017	P002	Thermal dryer #1 - gas firing	560 TPH	Venturi scrubber	D022	PM/PM-10, SO_2	7/30/04 (as amended 8/24/05)
S017A	P002	Thermal dryer #1 - coal firing	560 TPH	Venturi scrubber	D022	PM/PM-10, SO_2	7/30/04 (as amended 8/24/05)
S018	Z01	TD1 reclaim conveyor C8 to clean coal silo CCS 1 feed conveyor C9	560 TPH	Full enclosure	D023	PM/PM-10	7/30/04 (as amended 8/24/05)
S019	Z01	Conveyor C 5 (TD1 by-pass) to CCS 1 feed conveyor C9	560 TPH	Full enclosure	D023	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S020	Z01	Conveyor C19 to CCS1 feed conveyor C9	300 TPH	Full enclosure	D023	PM/PM-10	7/30/04 (as amended 8/24/05)
S021	Z01	Feed conveyor C9 to clean coal silo CCS1	2400 TPH	Full enclosure	D024	PM/PM-10	7/30/04 (as amended 8/24/05)
S022	Z01	CCS1 feed conveyor C9 to clean coal stacking tube feed conveyor C10	2400 TPH	Full enclosure	D024	PM/PM-10	7/30/04 (as amended 8/24/05)
S023	Z01	Conveyor C10 to clean coal stockpile CCSP1 stacking tube ST1	2400 TPH	Partial enclosure	D025	PM/PM-10	7/30/04 (as amended 8/24/05)
S025	Z01	Dozer grading clean coal stockpile CCP1	500 TPH	Water spray	D026	PM/PM-10	7/30/04 (as amended 8/24/05)
S026	Z01	CCP1 under-pile feeder to reclaim conveyor C11	4000 TPH	Full enclosure	D027	PM/PM-10	7/30/04 (as amended 8/24/05)
S027	Z01	CCP1 reclaim conveyor C11 to rail load-out conveyor C13	4000 TPH	Full enclosure	D028	PM/PM-10	7/30/04 (as amended 8/24/05)
S028	Z01	CCS1 reclaim feeder to reclaim conveyor C12	4000 TPH	Full enclosure	D054	PM/PM-10	7/30/04 (as amended 8/24/05)
S029	Z01	CCS1 reclaim conveyor C12 to rail load-out conveyor C13	4000 TPH	Full enclosure	D028	PM/PM-10	7/30/04 (as amended 8/24/05)
S030	Z01	Rail load-out conveyor C13 to rail load-out	4000 TPH	Full enclosure	D029	PM/PM-10	7/30/04 (as amended 8/24/05)
S032	Z01	Rail car loading through telescopic chute	4000 TPH	Telescopic chute	D030	PM/PM-10	7/30/04 (as amended 8/24/05)
S033	Z01	Truck loading through stationary chute	200 TPH	Stationary chute No. 3	D031	PM/PM-10	7/30/04 (as amended 8/24/05)
S034	Z01	Conveyor No. 17 to house coal load-out	200 TPH	Partial enclosure	D032	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S035	Z01	Truck loading of house coal	25 TPH	Stationary chute No. 4	D033	PM/PM-10	7/30/04 (as amended 8/24/05)
S036	Z01	Conveyor No. 17 to conveyor No. 18	200 TPH	Partial enclosure	D032	PM/PM-10	7/30/04 (as amended 8/24/05)
S037	Z01	Conveyor No. 18 to truck load-out feeder	200 TPH	Partial enclosure	D033	PM/PM-10	7/30/04 (as amended 8/24/05)
S038	Z01	Truck load-out feeder to truck load-out No. 1	200 TPH	Partial enclosure	D034	PM/PM-10	7/30/04 (as amended 8/24/05)
S039	Z01	Truck load-out feeder to truck load-out No. 2	200 TPH	Partial enclosure	D035	PM/PM-10	7/30/04 (as amended 8/24/05)
S040	Z01	Stationary chute truck loading No. 1	125 TPH	Stationary chute No. 5	D036	PM/PM-10	7/30/04 (as amended 8/24/05)
S041	Z01	Stationary chute truck loading No. 2	125 TPH	Stationary chute No. 6	D037	PM/PM-10	7/30/04 (as amended 8/24/05)
S042	Z01	Reject crusher CR1 to refuse bin BIN2	500 TPH	Full enclosure	D038	PM/PM-10	7/30/04 (as amended 8/24/05)
S044	Z01	Conveyor No. 14 to refuse bin	500 TPH	Partial enclosure	D039	PM/PM-10	7/30/04 (as amended 8/24/05)
S045	Z01	Refuse conveyor C16 to mountain refuse bin BIN3	1200 TPH	Full enclosure	D040	PM/PM-10	7/30/04 (as amended 8/24/05)
S046	Z01	Mountain refuse bin BIN3 stationary chute to refuse truck loading	1200 TPH	Stationary chute No. 7	D041	PM/PM-10	7/30/04 (as amended 8/24/05)
S047	Z01	Refuse truck dumping onto refuse pile	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S048	Z01	Dozer grading refuse pile	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S049	Z01	Refuse bin BIN2 dumping onto ground	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S050	Z01	End-loading refuse trucks	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S052	Z01	Truck dumping clean coal onto temporary clean coal stockpile CCP2	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S053	Z01	Dozer grading temporary stockpile CCP2	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S054	Z01	End-loading clean coal trucks	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S055	Z01	Unpaved roads	73,000 VMT	Water spray	D042	PM/PM-10	7/30/04 (as amended 8/24/05)
S056	P003	Rock dust silo	100 Tons	Fabric vent filter	D043	PM/PM-10	7/30/04 (as amended 8/24/05)
S057	P004	Magnetite silo	50 Tons	Fabric vent filter	D044	PM/PM-10	7/30/04 (as amended 8/24/05)
S058	Z01	Preparation plant PP1 fine clean coal conveyor C5	560 TPH	Full enclosure	D021	PM/PM-10	7/30/04 (as amended 8/24/05)
S059	Z01	Conveyor C5 to thermal dryer TD1 feed conveyor C6	560 TPH	Full enclosure	D045	PM/PM-10	7/30/04 (as amended 8/24/05)
S060	Z01	TD1 product to conveyor C7	560 TPH	Full enclosure	D046	PM/PM-10	7/30/04 (as amended 8/24/05)
S061	Z01	TD1 product conveyor C7 to TD1 reclaim conveyor C8	560 TPH	Full enclosure	D047	PM/PM-10	7/30/04 (as amended 8/24/05)
S062	Z01	PP1 coarse clean coal to conveyor C19	300 TPH	Full enclosure	D021	PM/PM-10	7/30/04 (as amended 8/24/05)
S063	Z01	Stacking tube ST1 to clean coal stockpile CCP1	2400 TPH	Drop height	D048	PM/PM-10	7/30/04 (as amended 8/24/05)
S064	Z01	PP1 refuse to main plant refuse conveyor C14	500 TPH	Full enclosure	D021	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S065	Z01	Refuse bin BIN2 to conveyor C16	1200 TPH	Full enclosure	D049	PM/PM-10	7/30/04 (as amended 8/24/05)
S201	Z01	Pocket lift conveyor to truck load-out bin conveyor	650 TPH	Partial enclosure	D201	PM/PM-10	7/30/04 (as amended 8/24/05)
S202	Z01	Truck load-out conveyor to truck load-out bin	650 TPH	Partial enclosure	D202	PM/PM-10	7/30/04 (as amended 8/24/05)
S203	Z01	Truck load-out bin to truck	650 TPH	Partial enclosure	D203	PM/PM-10	7/30/04 (as amended 8/24/05)
S204	Z01	Truck load-out to reclaim hopper	650 TPH	Partial enclosure	D204	PM/PM-10	7/30/04 (as amended 8/24/05)
S205	Z01	Pocket lift conveyor to vent production conveyor #1	650 TPH	Partial enclosure	D205	PM/PM-10	7/30/04 (as amended 8/24/05)
S206	Z01	Vent conveyor #1 to vent conveyor #2	650 TPH	Partial enclosure	D206	PM/PM-10	7/30/04 (as amended 8/24/05)
S207	Z01	Vent production conveyor #2 to breaker bin	650 TPH	Partial enclosure	D207	PM/PM-10	7/30/04 (as amended 8/24/05)
S208	Z01	Transfer conveyor to raw coal silo #2	650 TPH	Partial enclosure	D208	PM/PM-10	7/30/04 (as amended 8/24/05)
S209	Z01	Trucks-Raw coal to reclaim hopper	83,853 VMT	Water spray	D042	PM/PM-10	7/30/04 (as amended 8/24/05)
SC1	Z01	Rotary breaker 1 scalping screen	1200 TPH	Full enclosure	D003	PM/PM-10	7/30/04 (as amended 8/24/05)
CCP1	Z01	Main clean coal stockpile	3.5 acres	Water spray	D026	PM/PM-10	7/30/04 (as amended 8/24/05)
CCP2	Z01	Temporary clean coal stockpile	1 acre	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
CR1	Z01	Reject crusher 1 for RB1	1200 TPH	Full enclosure	D009	PM/PM-10	7/30/04 (as amended 8/24/05)
RB1	Z01	Rotary breaker 1	1200 TPH	Full enclosure	D006	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
RCP1	Z01	Temporary raw coal stockpile	1 acre	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
RCP3	Z01	Hoist 2 raw coal stockpile	1 acre	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
Mine Water Treatment Equipment							
EG		Generac model SD250 diesel-fueled emergency generator, model year 2009	250 kW, 384 hp	N/A	N/A	N/A	N/A
S125	P005	Soda ash silo	20 TPH	Fabric filter baghouse	C01	PM/PM-10	1/23/09 (as amended 10/28/09 & 8/26/11)
S126	P006	Hydrated lime silo	20 TPH	Fabric filter baghouse	C02	PM/PM-10	1/23/09 (as amended 10/28/09 & 8/26/11)
S127	P007	Hydrochloric acid tank	14 TPH	Fume scrubber	C03	HCl	1/23/09 (as amended 10/28/09 & 8/26/11)
S128	P008	Andritz DDC fluid bed salt dryer	7.2 TPH	Fabric filter baghouse	C05	PM/PM-10	1/23/09 (as amended 10/28/09 & 8/26/11)
S129	P009	Agglomerator/Crusher/Screen	5 TPH	Fabric filter baghouse	C05	PM/PM-10	1/23/09 (as amended 10/28/09 & 8/26/11)
S130	Z02	Wheeled loader to trucks	5 TPH	Enclosure	N/A	PM/PM-10	1/23/09 (as amended 10/28/09 & 8/26/11)

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.
VMT = vehicle miles traveled
TPH = tons per hour

EMISSIONS INVENTORY

A copy of the 2011 Emission Statement is attached. Emissions are summarized in the following table:

2011 Actual Emissions in Tons per Year

	VOC	CO	SO_2	PM-10	PM-2.5	NO_x	Methane (mass basis)	Methane as CO_2e
Total	185.0	70.55	0.0	44.45	20.6	44.85	69,498	1,459,458

*Note: CO_2e represents methane (a GHG) emitted by the underground mine on a carbon dioxide equivalent (CO_2e) basis.

UNDERGROUND COAL MINE APPLICABLE REQUIREMENTS – Emission Unit ID: BM1

Under Step 2 of the Tailoring Rule, any stationary source that emits or has the potential to emit at least 100,000 tons per year of CO_2e and 100 tons per year of GHG on a mass basis, is considered a major source of GHG and subject to Title V permitting requirements, regardless of criteria pollutant and HAP emissions. In accordance with a recent determination by the USEPA indicating underground coal mines with major methane emissions are subject to Title V permitting requirements, Consolidation Coal Company submitted a Title V operating permit application for the Buchanan mine facility. Since the mine is located on property contiguous to and under common ownership with the Buchanan coal preparation plant, the Buchanan mine is now included with the preparation plant in the Title V operating permit.

Limitations

The provisions of 9 VAC 5-50-10.D indicate that in the absence of more restrictive permit conditions or specific requirements from 9 VAC 5 Chapter 50, the provisions of 9 VAC 5 Chapter 40 shall apply. A review of 9 VAC 5 Chapter 40 indicates the following emissions standards in 9 VAC 5-40 Article 4 – Emission Standards for General Process Operations apply to the underground coal mine:

> 9 VAC 5-40-260.D: Standard for particulate matter for process weight rates in excess of 60,000 pounds per hour using the following equation:
>
> $$E = 55.0P^{0.11} - 40,$$
>
> Where:
>
> E = emission rate in lb/hr, and
> P = process weight in tons/hr.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable to BM1 vent shaft exhausts:

> 9 VAC 5-50-80, Standard for Visible Emissions.

Vent shaft exhausts are not specifically identified in the Title V permit since ventilation of underground coal mining is a dynamic process, with new shafts frequently constructed to vent active, constantly moving underground mining areas and old inactive shafts are closed.

Monitoring

The maximum allowable PM emission rate calculated in accordance with the equation indicated in 9 VAC 5-40-260 D is based on the process weight rate of the affected process. Therefore, recordkeeping demonstrating the process weight rate of the mine can be used to demonstrate compliance with the PM emission standard and satisfies the periodic monitoring requirement.

Compliance with the PM and opacity standards is monitored by visible emission observations performed on each active exhaust vent of the underground coal mine. The permittee is required to conduct quarterly visual observations of each active coal mine exhaust vent. If visible emissions appear to exceed 10% opacity during these weekly visual observations, a six-minute visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9, must be performed. If during the six minutes, any readings above 20% opacity are noted, a one-hour VEE will be required. A Method 9 evaluation will not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exceed 10% opacity; the mine is operating at normal conditions; and, the cause and corrective measures taken are recorded.

Recordkeeping

The Title V permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

> The production rate of raw coal in tons per hour from the underground coal mine, calculated monthly as the sum of each consecutive 12-month period; and
>
> Results of visible emission observations and evaluations.

Testing

The permit does not require specific tests of the underground coal mine. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

There are no specific reporting requirements for the underground coal mine.

COAL PROCESSING AND PREPARATION EQUIPMENT APPLICABLE REQUIREMENTS – Thermal Dryer #1: ENI coal/gas-fired "Coal-Flo" #10, Emission Unit ID: S017/S017A, and various coal processing and preparation equipment

Limitations

The following limitations are state BACT requirements from the PSD permit issued on July 30, 2004 (as amended August 24, 2005). Specific condition numbers noted below are from the PSD permit.

Condition 3.a: Coal conveying and storage equipment shall be covered.

Condition 3.b: Particulate emissions from screening, crushing, transfer and handling shall be controlled by a wet type dust collector, spray systems, enclosure or equivalent.

Condition 3.c: Coal cleaning and associated processing equipment shall be enclosed in the main building and shall utilize a wet process.

Condition 3.d: Coal refuse handling shall utilize high moisture content.

Condition 3.e: Particulate emissions from the thermal dryer shall be controlled by a high energy venturi scrubber.

Condition 3.f: Particulate emissions from open coal stockpiles shall be controlled by wet suppression.

Condition 3.g: The rail load-out station shall be equipped with a flood-loading chute that telescopes down into the hopper cars.

Condition 3.h: Rock dust and magnetite silo vents shall be equipped with fabric filters.

Condition 3.i: Haul roads and parking areas shall be watered using a water truck and/or paved.

Condition 6: The production of clean coal from the facility shall not exceed 8.4 million tons per year.

Condition 7: Approved fuels for the thermal dryer are bituminous coal, coal-bed methane gas and natural gas.

Condition 8: Differential pressure drop across the venturi scrubber shall be a minimum of 21.7 inches of water.

Condition 9: Emissions from the operation of the thermal dryer shall not exceed the following:

Particulate Matter	0.025 gr/dscf	125.3 tons/yr
PM-10	0.019 gr/dscf	95.0 tons/yr
Sulfur Dioxide	0.20 lb/MMBtu	119.6 tons/yr
Nitrogen Oxides (as NO_2)	0.46 lb/MMBtu	278.1 tons/yr
Volatile Organic Compounds	0.60 lb/MMBtu	362.7 tons/yr
Carbon Monoxide	2.34 lb/MMBtu	1,414.7 tons/yr

Condition 10: Emissions from the operation of the coal processing and conveying equipment, coal storage equipment, and coal transfer and loading equipment shall not exceed the following:

Particulate Matter	20.05 lb/hr	45.73 tons/yr
PM-10	7.53 lb/hr	15.79 tons/yr

Condition 11: Emissions from the operation of the wet processes in the coal preparation plant shall not exceed the following:

Volatile Organic Compounds	53.1 tons/yr

Condition 12: Average sulfur content of coal burned in the thermal dryer shall not exceed 1.0% by weight.

Condition 13: Visible emissions from the thermal dryer and each piece of coal processing, conveying, storage, transfer and loading equipment shall not exceed 20% opacity as determined by 40 CFR, Appendix A, Method 9.

Condition 14: Except where the permit is more restrictive than the applicable requirement, equipment subject to NSPS Subpart Y shall be operated in compliance with the requirements of NSPS Subpart Y.

Condition 24: The permittee will be required to take measures pertaining to maintenance, written operating procedures and training in order to minimize the duration and frequency of excess emissions.

As a thermal dryer constructed, reconstructed or modified after October 27, 1974, and on or before April 28, 2008, the following New Source Performance Standards (NSPS) in 9 VAC 5-50, Article 5, Subpart Y of Virginia air quality regulations and 40 CFR Part 60, Subpart Y – Standards of Performance for Coal Preparation and Processing Plants apply to the dryer:

40 CFR 60.252(a)(1): Emission standard for PM of 0.031 grains per dry standard cubic foot of exhaust air (gr/dscf); and

The *NSPS emission standard for PM is not specifically included in the Title V permit since the BACT emission limit in Condition 9 of the PSD permit is more stringent.*

40 CFR 60.252(a)(2): Visible emission limit of 20 percent opacity.

As coal processing, conveying, storage, transfer and loading equipment constructed, reconstructed or modified after October 27, 1974, and on or before April 28, 2008, the following New Source Performance Standards (NSPS) in 9 VAC 5-50, Article 5, Subpart Y of Virginia air quality regulations and 40 CFR Part 60, Subpart Y – Standards of Performance for Coal Preparation and Processing Plants apply:

40 CFR 60.254(a): Visible emission limit of 20 percent opacity.

The 20% opacity limit specified in Subpart Y of the NSPS is included in the Title V permit instead of the Part V visible emission limit, since the Part V limit allows one six-minute period per hour of 30% opacity.

Monitoring

The facility is a major source subject to Title V permitting and therefore subject to 40 CFR Part 64 – Compliance Assurance Monitoring (CAM). An emission unit is subject to CAM if it meets all of the following criteria on a pollutant-by-pollutant basis:

a. Emits or has the potential to emit uncontrolled quantities of one or more regulated air pollutants at or above major source levels,

b. Is subject to one or more emissions limitations for the regulated air pollutants for which it is major before control, and

c. Uses an add-on control device to achieve compliance with the emissions limitations.

The thermal dryer is the only emission unit currently at the Buchanan plant that meets all the above criteria as follows:

a. The thermal dryer emits uncontrolled quantities of PM, PM-10, NOx, SO_2, VOC and CO above major source levels,

b. The thermal dryer is subject to emission limits for PM, PM-10 and SO_2 as indicated in Condition 9 of the PSD permit, and

c. The thermal dryer uses a venturi scrubber to comply with the emission limits for PM, PM-10 and SO_2.

Because the thermal dryer meets the above criteria only when considering PM, PM-10 and SO_2, CAM is required only for those pollutants. The applicant submitted CAM information as required by 40 CFR 64.5, Deadlines for Submittals.

The following are monitoring requirements from the PSD permit issued on July 30, 2004 (as amended August 24, 2005). Specific condition numbers noted below are from the PSD permit.

Condition 4a: Continuous measurement of thermal dryer exit gas temperature.

Condition 4b: Continuous measurement of pressure loss through the venturi constriction.

Condition 4c: Continuous measurement of water supply pressure to control equipment.

Condition 4d: Monitoring device for the measurement of the temperature of the thermal drying chamber.

Condition 4: Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be recalibrated annually. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the thermal dryer is operating.

Condition 5: The monitoring devices used to continuously measure thermal dryer and associated control system parameters shall be observed with a frequency of not less than once per hour.

The monitoring proposed in the Compliance Assurance Monitoring plan submitted by the applicant complies with the applicable monitoring requirements in 40 CFR 60.256(a) and Conditions 4 and 5 of the PSD permit.

The permit contains requirements to monitor, operate, calibrate and maintain the above-listed devices according to the CAM plan proposed by the applicant and summarized in the following table:

Thermal Dryer Compliance Assurance Monitoring Plan

	Indicator No. 1	Indicator No. 2	Indicator No. 3	Indicator No. 4
I. Indicator	Exhaust Gas Temperature	Pressure Loss	Water Supply Pressure	Thermal drying chamber temperature
A. Measurement Approach	Temperature probe	Differential pressure gage	Pressure gage	Temperature probe
II. Indicator Range	An excursion is defined as an exit gas temperature greater than 160 °F	An excursion is defined as a pressure loss through the scrubber of less than 21.7 inches water column	An excursion is defined as a water supply pressure of less than 15 pounds per square inch gage	An excursion is defined as a drying chamber temperature greater than 1,400 °F
III. Performance Criteria A. Data Representativeness	The temperature probe monitors the temperature of the gas at the exit of the thermal dryer	The differential pressure gage monitors the static pressures upstream and downstream of the scrubber's venturi throat	The water pressure gage monitors water supply pressure to the scrubber. The gage is to be located close to the water discharge point.	The temperature probe monitors the temperature at the entrance to the drying chamber (just below the restriction deck) of the thermal dryer
B. Verification of Operational Status	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests
C. QA/QC Practices and Criteria	The device is to be certified by the manufacturer to be accurate within ±3° Fahrenheit and calibrated annually based on the manufacturer's recommendations	The device is to be certified by the manufacturer to be accurate within ±1 inch water gage and calibrated annually based on the manufacturer's recommendations	The device is to be certified by the manufacturer to be accurate within ±5% of design water supply pressure and calibrated annually based on the manufacturers recommendations	The device is to be certified by the manufacturer to be accurate within ±3° Fahrenheit and calibrated annually based on the manufacturer's recommendations
D. Monitoring Frequency	Measure continuously	Measure continuously	Measure continuously	Measure continuously
E. Data Collection Procedures	Record continuously on a chart recorder	Record continuously on a chart recorder	Record continuously on a chart recorder	Record continuously on a chart recorder
F. Averaging Period	None	None	None	None

The indicators reflect the performance of the venturi scrubber and thermal dryer. The range of operation for each indicator is based on manufacturer design and performance test data. The permit contains requirements for performance tests for emissions of PM, PM-10 and SO_2 from the thermal dryer once every two years. Performance test data are used to verify the accuracy of each indicator range so that ongoing compliance with the emission limits is reasonably assured. Operation of the thermal dryer and venturi scrubber so that each indicator is maintained within the appropriate range provides a reasonable assurance of compliance with the emission limits for the subject pollutants.

The permit contains conditions requiring the permittee to conduct monitoring in accordance with 40 CFR 70.6(a)(3)(i) and 40 CFR 64.6(c).

PM, PM-10, SO_2, NO_x, CO, and VOC emission limits for the thermal dryer are based on data from stack tests conducted on the unit. Stack test results indicate PM-10 emissions are 76% of PM emissions. Annual criteria pollutant emission limits were calculated by multiplying the hourly emission rates by 8,760 hours per year (hr/yr). Since criteria pollutant emission limits for the thermal dryer are based on the capacity of the dryer, there should not be a violation of the emission limits if the dryer is operated at or below capacity.

The permittee is required to conduct weekly visual observations of the thermal dryer exhaust stack. If visible emissions appear to exceed 10% opacity during these weekly visual observations, a six-minute visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9, must be performed. If during the six minutes, any readings above 20% opacity are noted, a one-hour VEE will be required. A Method 9 evaluation will not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exceed 10% opacity; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. This satisfies the periodic monitoring requirement for the visible emission limitation included in the permit.

Annual emission limits established for PM, PM-10, and VOC emissions from coal processing, conveying, storage, transfer and loading equipment are based on the clean coal production limit contained in Condition 6 of the PSD permit. Regarding these pollutants, clean coal production is the factor that determines emission rates. Therefore, as long as the clean coal production limit is not violated, there should be no violation of emission limits. Recordkeeping demonstrating compliance with the production limit can be used to demonstrate compliance with the emission limits; therefore, production limits satisfy the periodic monitoring requirement.

The permittee is required to conduct weekly visual observations of all coal processing, conveying, storage, transfer and loading equipment. If visible emissions appear to exceed 10% opacity during these weekly visual observations, a six-minute visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9, must be performed on the emissions unit. If during the six minutes, any readings above 20% opacity are noted, a one-hour VEE will be required. A Method 9 evaluation will not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exceed 10% opacity; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. This satisfies the periodic monitoring requirement for the visible emission limitation included in the permit.

Recordkeeping

The Title V permit includes recordkeeping requirements from Condition 18 of the PSD permit and for maintaining records of all monitoring and testing required by the permit. These records include:

The production of clean coal from the facility, calculated monthly as the sum of each consecutive 12-month period;

The production of dried coal from the thermal dryer, calculated monthly as the sum of each consecutive 12-month period;

The consumption of coal, coal-bed methane and natural gas, indicating sulfur content for the coal for the thermal dryer, calculated monthly as the sum of each consecutive 12-month period;

The temperature of the thermal dryer gas exhaust, pressure loss through the venturi constriction of control equipment on the dryer, control equipment water supply pressure and temperature of the thermal drying chamber, recorded hourly;

Emission factors and equations used for compliance;

Stack test results, visible emission observations and evaluations and performance evaluations;

Annual cyclone inspections; and

Scheduled and unscheduled maintenance and operator training.

Testing

The following testing requirements are from the PSD permit issued on July 30, 2004 (as amended August 24, 2005). Specific condition numbers noted below are from the PSD permit.

Condition 15: The permittee shall conduct visible emission evaluations on all coal processing, conveying, storage, transfer and loading equipment that is to be constructed subject to NSPS, Subpart Y in accordance with 40 CFR 60, Appendix A, Method 9.

Some equipment listed in PSD condition 2 has not been constructed. Since construction has been discontinued for a period of 18 months or more, the provisions of this condition are invalid in accordance with PSD condition 20, and therefore, not included in the Title V permit. The permittee must reapply for future construction

Condition 16: The permittee shall conduct performance tests for SO_2, NO_2, VOC, and CO, from the thermal dryer, once every two years and upon request by the DEQ. The thermal dryer is exempt from SO_2 testing if firing gas. Additionally, the permittee shall conduct performance tests for particulate matter from the thermal dryer, once every two years and upon request by the DEQ.

Condition 19: The permitted facility shall be constructed and modified so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.

The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permittee is required to report the results of each performance test conducted on the thermal dryer.

The following reporting requirements are from condition 17 in the PSD permit issued on July 30, 2004 (as amended August 24, 2005):

Condition 17: The permittee shall furnish written notification to the Director, Southwest Regional Office of the actual date on which construction of the coal handling, processing and storage equipment commenced, actual startup date of the equipment and the anticipated date of visible emission evaluations of the equipment. Copies shall be sent to EPA, Region III.

Some equipment listed in PSD condition 2 has not been constructed. Since construction has been discontinued for a period of 18 months or more, the provisions of this condition are invalid in accordance with PSD condition 20, and therefore, not included in the Title V permit. The permittee must reapply for future construction.

MINE WATER TREATMENT EQUIPMENT APPLICABLE REQUIREMENTS – Soda Ash Silo, Emission Unit ID: S125; Hydrate Lime Silo, Emission Unit ID: S126; Andritz DDC Fluid Bed Salt Dryer, Emission Unit ID: S128; Agglomerator/Crusher/Screen, Emission Unit ID: S129; Salt Storage and Load-out, Emission Unit ID: 130; and Emergency Generator, Emission Unit ID: EG

Limitations

The following limitations are state BACT requirements from the minor NSR permit issued on January 23, 2009 (as amended October 28, 2009 and August 26, 2011). Specific condition numbers noted below are from the minor NSR permit.

Condition 2: Particulate emissions from the soda ash silo and hydrated lime silo shall be controlled by fabric filter baghouses.

Condition 3: Particulate emissions from the fluid bed salt drying system shall be controlled by a fabric filter baghouse.

Condition 4: Particulate emissions from the salt press, salt crusher and salt screen shall be controlled by a fabric filter baghouse.

Condition 5: Particulate emissions from salt storage and load-out shall be controlled by partial enclosure.

Condition 7: Throughput of soda ash to the soda ash storage silo shall not exceed 2,190 tons per year.

Condition 8: Throughput of hydrated lime to the hydrated lime storage silo shall not exceed 3,760 tons per year.

Condition 9: The production of dried salt from the salt drying system shall not exceed 43,800 tons per year.

Condition 10: Approved fuel for the salt dryer is natural gas.

Condition 11: Total combined emissions from the operation of the fluid bed salt drying system, salt press, salt crusher and salt screen as exhausted through the two fabric filter baghouses and common exhaust stack shall not exceed the following limits:

PM	0.020 gr/dscf	2.50 lb/hr	10.92 tons/yr
PM-10		0.63 lb/hr	2.73 tons/yr

Since the salt crusher and salt screen are subject to the provisions of New Source Performance Standards (NSPS) Subpart OOO, emissions from the common exhaust stack which includes the dryer, press, crusher and screen must meet the more stringent NSPS standard. Therefore, the above grain loading limit is replaced in the Title V permit with the more stringent applicable grain loading limit from Subpart OOO.

Condition 12: Visible emissions from the soda ash storage silo and hydrated lime storage silo fabric filter baghouse exhausts shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10 percent opacity.

Condition 13: Visible emissions from the salt storage and load-out shall not exceed 10 percent opacity.

Condition 14: Visible emissions from the fluid bed salt drying system, salt press, salt crusher and salt screen fabric filter baghouses' common exhaust shall not exceed 7 percent opacity as determined by 40 CFR, Appendix A, Method 9.

Condition 15: Except where this permit is more restrictive than the applicable requirement, the salt crusher and salt screen shall be operated in compliance with the requirements of 40 CFR 60, Subpart OOO.

As non-metallic mineral processing equipment constructed after April 22, 2008, the salt crusher and salt screen are subject to 9 VAC 5-50-410, Subpart OOO of Virginia air quality regulations and the following provisions of 40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants:

40 CFR 60.672(a): Emission standards applicable to equipment constructed after April 22, 2008, as indicated in Table 2 of the subpart which includes a grain loading limit of 0.014 gr/dscf and no applicable opacity limit.

The minor NSR permit was issued just prior to promulgation of the current NSPS grain loading standard and was more stringent than the NSPS standard at that time. The current NSPS grain loading standard (0.014 gr/dscf) is included in the Title V permit since it is more stringent than the limit (0.020 gr/dscf) in Condition 11 of the minor NSR permit.

As an emergency generator compression ignition engine manufactured after April 1, 2006, the following provisions of 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines apply:

40 CFR 60.4205(b): Comply with emission standards for new non-road compression ignition engines in §60.4202;

The permittee's engine is subject to 40 CFR 60.4202(a)(2), which references the certification emission standards in 40 CFR 89.112 and 40 CFR 89.113.

40 CFR 60.4206: Must operate and maintain the affected engine that achieves the emission standards over the entire life of the engine;

40 CFR 60.4207(b): Must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel;

40 CFR 60.4211(a): Except as specified in 40 CFR 60.4211(g), operate and maintain the engine according to manufacturer's written instructions;

40 CFR 60.4211(c): Except as specified in 40 CFR 60.4211(g), must purchase an engine certified to the applicable emission standards and install and configure the engine according to the manufacturer's emission related specifications;

The permittee has purchased a certified engine; therefore, that requirement of §60.4211(c) is not included in the Title V permit.

40 CFR 60.4211(f): Operational restrictions for the purpose of maintenance checks and readiness testing; and

40 CFR 60.4211(g): Alternative to installing, configuring, operating and maintaining the engine according to the manufacturer's emission-related written instructions.

As a new stationary reciprocating internal combustion engine located at an area source of HAP, the engine is subject to the following provisions of 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:

40 CFR 63.6590(c)(1): The engine must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for such engines under Subpart ZZZZ.

Monitoring

The monitoring requirements included in the Title V permit meet Part 70 requirements.

As non-metallic mineral processing equipment constructed after April 22, 2008, that uses a baghouse to control emissions, the salt crusher and salt screen are subject to 9 VAC 5-50-410, Subpart OOO of Virginia air quality regulations and the following provisions of 40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants:

40 CFR 60.674(c): Except as specified in 40 CFR 60.674(d), a 30-minute visible emissions inspection must be conducted quarterly using EPA Method 22, while the baghouse is operating; and

40 CFR 60.674(d): May use a bag leak detection system as an alternative to the periodic inspections required by 40 CFR 60.674(c).

Since the baghouse controlling emissions from the salt dryer shares a common stack with the baghouse for the salt crusher, screen and press, the salt dryer baghouse is included in the quarterly visible emissions inspections as required by Subpart OOO for the salt press and screen. This satisfies the periodic monitoring requirement for the visible emission limitations included in the permit.

Annual emission limits established for PM and PM-10 emissions from the salt dryer, press, crusher and screen are based on the dried salt production limit contained in Condition 9 of the minor NSR permit. Regarding these pollutants, dried salt production is the factor that determines emission rates. Therefore, as long as the dried salt production limit is not violated, there should be no violation of emission limits. Recordkeeping demonstrating compliance with the production limit can be used to demonstrate compliance with the emission limits; therefore, production limits satisfy the periodic monitoring requirement.

The permittee is required to conduct weekly visual observations of the soda ash storage silo and hydrated lime storage silo. If visible emissions are observed during these weekly visual observations, a six-minute visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9, must be performed on the emissions unit. If during the six minutes, any readings above 5% opacity are noted, a one-hour VEE will be required. A Method 9 evaluation will not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions are present; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. This satisfies the periodic monitoring requirement for the visible emission limitations included in the permit.

The permittee is required to conduct weekly visual observations of salt storage and load-out. If visible emissions appear to exceed 5% opacity during these weekly visual observations, a six-minute visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9, must be performed on the operation. If during the six minutes, any readings above 10% opacity are noted, a one-hour VEE will be required. A Method 9 evaluation will not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exceed 5% opacity; the operation is at normal conditions; and, the cause and corrective measures taken are recorded. This satisfies the periodic monitoring requirement for the visible emission limitation included in the permit.

Manufacturer's information indicates the emergency generator engine meets the standards applicable to non-emergency engines and is not equipped with a diesel particulate filter. Therefore, the monitoring requirements of 40 CFR 60.4209, do not apply to the emergency generator engine.

Recordkeeping

The Title V permit includes recordkeeping requirements from Condition 16 of the minor NSR permit and for maintaining records of all monitoring and testing required by the permit. These records include:

> Annual production of dried salt from the fluid bed salt dryer, calculated monthly as the sum of each 12-month period; and
>
> Annual throughput of soda ash and hydrated lime, calculated monthly as the sum of each consecutive 12-month period;
>
> Stack test results, visible emission observations and evaluations, and performance evaluations; and,

Scheduled and unscheduled maintenance and operator training.

As non-metallic mineral processing equipment constructed after April 22, 2008, the salt crusher and salt screen are subject to 9 VAC 5-50-410, Subpart OOO of Virginia air quality regulations and the following provisions of 40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants:

40 CFR 60.676(b)(1): Record each periodic inspection in an electronic or written logbook.

Manufacturer's information indicates the emergency generator engine was manufactured prior to any model year specified in Table 5 of NSPS Subpart IIII and is not equipped with a diesel particulate filter. Therefore, the recordkeeping requirements of 40 CFR 60.4214(b) and (c), do not apply to the emergency generator engine.

Testing

The following testing requirements are from the minor NSR permit issued on January 23, 2009 (as amended October 28, 2009 and August 26, 2011). Specific condition numbers noted below are from the minor NSR permit.

Condition 6: The permitted facility shall be constructed and modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations.

Condition 17: Initial performance tests shall be conducted for particulate matter from the fluid bed salt dryer, salt press, salt crusher and salt screen fabric filter baghouses' exhaust.

Condition 18: Concurrently with the initial performance tests, visible emission evaluations in accordance with 40 CFR Part 60, Appendix A, Method 9 shall be conducted on the fluid bed salt dryer, salt press, salt crusher and salt screen fabric filter baghouses' exhaust.

The one-time tests required by Conditions 17 and 18 of the minor NSR permit were conducted in October 2011. Test results indicate an average grain loading of 0.004 gr/dscf demonstrating compliance with the minor NSR permit emission limits. Since the initial performance test requirements have been met, the requirements no longer apply and are not included in the Title V permit.

As non-metallic mineral processing equipment constructed after April 22, 2008, the salt crusher and salt screen are subject to 9 VAC 5-50-410, Subpart OOO of Virginia air quality regulations and the following provisions of 40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants:

40 CFR 60.675(a): Specified reference methods and procedures for conducting performance tests.

40 CFR 60.675(b): Performance test requirements to determine compliance with the PM standards in §60.672(a).

Performance tests were conducted in October 2011. Test results indicate an average grain loading of 0.004 gr/dscf demonstrating compliance with the applicable PM standard in §60.672(a). Since the performance test requirements in §60.675(b) have been met, they no longer apply and are not included in the Title V permit.

The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

As a non-metallic mineral processing facility constructed after April 22, 2008, the facility is subject to 9 VAC 5-50-410, Subpart OOO of Virginia air quality regulations and the following provisions of 40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants:

40 CFR 60.676(f): Submit written reports of the results of all performance tests.

40 CFR 60.676(i): Submit notification of initial startup of each affected facility.

The permittee has submitted performance test reports as required in §60.676(f), and notifications required in §60.676(i). Therefore, these requirements and are not included in the Title V permit.

As an emergency generator compression ignition engine manufactured after April 1, 2006, the following provisions of 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines apply:

40 CFR 60.4214(b): The owner/operator is not required to submit an initial notification.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by □□§2.1-20.01:2 and □§10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement No. 2-2003".

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A

facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on General Condition F.

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

STATE-ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State:

9 VAC 5, Chapter 50, Part II, Article 2 – Standard of Performance for Odorous Emissions; and

9 VAC 5, Chapter 60, Part II, Article 5 – Emission Standards for Toxic Pollutants from New and Modified Sources.

Conditions 27 – 29, of the minor NSR permit for the mine water treatment facility issued on January 23, 2009 (as amended October 28, 2009 and August 26, 2011) implement the requirements of Article 5 referenced above and are therefore State-Only Enforceable and not included in the Title V permit.

FUTURE APPLICABLE REQUIREMENTS

Consolidation Coal Company did not identify any future applicable requirements in their application, and DEQ is unaware of any future requirements that may apply during the life of the Title V permit. Therefore, no future applicable requirements have been included in the permit.

INAPPLICABLE REQUIREMENTS

The requirements of 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting are not applicable under the Title V permitting program. The definition of “applicable requirement” in 40 CFR 70.2 and 71.2 does not include requirements such as those included in Part 98, promulgated under Clean Air Act (CAA) section 114(a)(1) and 208.

As a result of several USEPA actions regarding greenhouse gases (GHG), emissions of GHG must be addressed for a Title V permit issued after January 1, 2011. The current state permits for the preparation plant contain no GHG-specific BACT requirements and there have been no modifications at the preparation plant requiring a review of GHG emissions. Since the underground coal mine is not subject to new source review, BACT for the mine has not been established and consequently there are no GHG-specific BACT requirements applicable to the mine. Therefore, there are no applicable BACT requirements for the facility specific to GHG.

COMPLIANCE PLAN

Consolidation Coal Company is currently in compliance with all applicable requirements. No compliance plan was required in the application.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation[1] (9 VAC)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
INS-01	Storage Tanks	5-80-720 B.2.	VOC	N/A
INS-02	Emergency Dryer Bypass	5-80-720 B	VOC, NO_x, SO_2, PM-10, CO	N/A
INS-03	Thermal Dryer Pre-Igniters	5-80-720 B	VOC, NO_x, SO_2, PM-10, CO	N/A
S031	Rail Car Load-out Sprays	5-80-720 B.2.	VOC	N/A

[1]The citation criteria for insignificant activities is as follows:

9 VAC 5-80-720 B - Insignificant due to emission levels.

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit will be published in the *Virginia Mountaineer* newspaper in Grundy, Virginia. A copy of the draft permit and public notice will be sent to the USEPA prior to publication of the public notice. A copy of the public notice will be sent to the affected states, including West Virginia, Kentucky, North Carolina and Tennessee. A copy of the public notice will be sent to all persons on the Title V mailing list by electronic mail, fax or postal mail no later than the day of publication of the public notice.

Public comments will be accepted for 30 days following the day of publication of the public notice.